

## Master of Information Technology (846AA.8)

Please note these are the 2023 details for this course

## **Domestic students**

Selection rank	PG
Delivery mode	On campus
Location	Bruce, Canberra
Duration	1.5 years
Faculty	Faculty of Science and Technology
Discipline	Academic Program Area - Technology
UAC code	880265
English language requirements	An IELTS Academic score of 6.5 overall, with no band score below 6.0 (or equivalent).

View IELTS equivalences

## International students

Academic entryTo study at UC, you'll need to meet our academic entry requirements and any admission requirementsrequirementsspecific to your course. Please read your course admission requirements below. To find out whether you<br/>meet UC's academic entry requirements, visit our academic entry requirements page.

View UC's academic entry requirements

Delivery mode	On campus
Location	Bruce, Canberra
Duration	1.5 years
Faculty	Faculty of Science and Technology
Discipline	Academic Program Area - Technology
CRICOS code	054178E
English language requirements	An IELTS Academic score of 6.5 overall, with no band score below 6.0 (or equivalent).
	View IELTS equivalences

# About this course

## Master a range of advanced IT skills

The UC Master of Information Technology is specifically designed for those who have an Australian bachelor's degree in information and communications technology, or the equivalent, and looking to create a direct path to a more senior management position.

In this course you will learn how understand and confidently navigate complex ICT subjects, including information science research methodology, technology and engineering management, and explore the emerging areas of advanced IT.

Highly adaptable and flexible, this course allows you to tailor your study plan to include up-to-the-minute specialisation, and also offers a selection of delivery modes, including classes during both weekday evenings and weekday business hours, to help you balance study with your other commitments.

This course also offers an option of undertaking a practical internship within a recognised organisation which is designed to significantly help you build on your classroom knowledge, improve your professional network and provide you with comprehensive insights into genuine working IT environments.

Once you graduate you will possess both the confidence and competence to pursue career advancement in your chosen field of IT, or if you prefer, well-positioned to continue with further postgraduate study in the form of a PhD.

This course offers the chance to specialise in Artificial Intelligence & Machine Learning, Cloud Computing, Cybersecurity, Data Science, Internet of Things & Robotics, Network Technologies or Project Management.

## Study a Master of Information Technology at UC and you will:

- learn how to operate a professional IT practice
- study a broad context of advanced contemporary IT issues
- work alongside and with professional industry specialists
- gain access to UC's professional network
- improve your own professional networks
- fine-tune your written communication skills in the form of management reports, user manuals and technical documentation
- graduate with top level globally recognised qualification
- open new pathways for career progression.

## Work Integrated Learning (WIL)

WIL is an integral component of the Master of Information Technology course as it offers students the opportunity to gain valuable hands-on experience and build professional relationships through real work, or work-like placements.

To ensure our students have access to the right people and places, UC works hard to foster close industry connections and regularly engages with industry partners who possess both the skills and experience to provide specialised knowledge and training opportunities.

All course content is reviewed annually by our Course Advisory Group which is made up of a panel of highly qualified and respected industry experts.

## Career opportunities

The UC Master of Information Technology degree is a highly respected industry qualification that offers a direct pathway for progression into a senior management position in any one of the following areas:

- Business and systems analyst
- ICT manager
- ICT security engineer
- Network and systems administrator
- Programmer
- Web developer

## Course-specific information

Applicants need to have completed a bachelor's degree in an Information and Communication Technology discipline, or the equivalent. If they have an Australian graduate diploma degree, or the equivalent, in a relevant Information and Communication Technology discipline, 12 credit points are granted, which will equal the first semester's study of the course.

If they have an Australian bachelor's degree in a relevant Information and Communication Technology discipline, or the equivalent plus three years of relevant working experience in ICT disciplines, 12 credit points are granted, which will equal the first semester's study of the course.

Knowledge of IT and/or Business Informatics is assumed.

This is an advanced course in ICT and doesn't need Australian Computer Society (ACS) accreditation, as ACS currently only accredits entry-level ICT courses.

## Professional accreditation

None.

## **Admission requirements**

An Australian bachelor degree in an Information and Communication Technology discipline, or equivalent.

If an applicant has an Australian graduate diploma degree, or equivalent, in a relevant Information and Communication Technology discipline, 12 credit points are granted, which equals to one semester's study of the course.

If an applicant has an Australian bachelor degree in a relevant Information and Communication Technology disciplines, or equivalent, plus 3 years relevant working experience in ICT disciplines, 12 credit points are granted, which equals to one semester's study of the course.

## Assumed knowledge

Proficiency in using computers.

## Periods course is open for new admissions

This course is not open for new admissions.

## Credit arrangements

There are currently no formal credit transfer arrangements for entry to this course. Any previous study or work experience will only be considered as part of the application process in accordance with current course rules and university policy.

# **Course requirements**

## Master of Information Technology (846AA) | 36 credit points

#### Required - Must pass 18 credit points as follows

Expand All | Collapse All

Inf. Sc. Research Methodology PG (6797) | 3 credit points – Level P
Technology and Engineering Management PG (9784) | 3 credit points – Level P
Contemporary IT & E Issues PG (9787) | 3 credit points – Level P
Technology Capstone Research Project PG (11522) | 6 credit points – Level P
Technological Innovation and Entrepreneurship G (11530) | 3 credit points – Level G

#### Award Options - Must select 1 of the following

#### Cybersecurity specialisation - 18 credit points as follows

#### Specialist Units - Must pass 12 credit points as follows

Information Security PG (6682) | 3 credit points – Level P Introduction to Digital Forensics G (9075) | 3 credit points – Level G System and Network Administration PG (11515) | 3 credit points – Level P Introduction to Cyber Safety G (11623) | 3 credit points – Level G

#### Restricted Choice Units - Must pass 6 credit points from the following

#### Part A - Must pass 3 credit points from the following

Computer and Network Security PG (6697) | 3 credit points – Level P Advanced Cyber Security PG (11940) | 3 credit points – Level P

- From 2023, unit 6697 Computer and Network Security PG has been renamed to 11940 Advanced Cyber Security PG.

#### Part B - Must pass 3 credit points from the following

- 3 credit points of ITS unit at G or PG level

#### Network Technologies specialisation - 18 credit points as follows

High Speed Networks PG (6692) | 3 credit points – Level P Computer and Network Security PG (6697) | 3 credit points – Level P Introduction to Network Engineering G (10088) | 3 credit points – Level G Network Architecture PG (10099) | 3 credit points – Level P Wireless Networks PG (10100) | 3 credit points – Level P System and Network Administration PG (11515) | 3 credit points – Level P

#### No Specialisation - 18 credit points as follows

- 9 credit points of ITS units at G or PG level
- 9 credit points of ITS units at PG level

#### AI & Machine Learning specialisation - 18 credit points as follows

Designing Human-Computer Interaction G (6673) | 3 credit points – Level G Artificial Intelligence Techniques PG (6685) | 3 credit points – Level P Soft Computing PG (7197) | 3 credit points – Level P Computer Vision and Image Analysis PG (8890) | 3 credit points – Level P Software Technology 1 G (8995) | 3 credit points – Level G Pattern Recognition and Machine Learning PG (11512) | 3 credit points – Level P

#### Cloud Computing specialisation - 18 credit points as follows

#### Specialist Units - Must pass 12 credit points as follows

Introduction to Network Engineering G (10088) | 3 credit points – Level G Network Architecture PG (10099) | 3 credit points – Level P Enterprise and Cloud Computing PG (11510) | 3 credit points – Level P Cloud Computing Architecture PG (11527) | 3 credit points – Level P

#### Restricted Choice Units - Must pass 6 credit points from the following

- 6 credit points of ITS units at G or PG level

#### Data Science specialisation - 18 credit points as follows

Introduction to Statistics G (6554) | 3 credit points – Level G Data Analytics and Business Intelligence PG (8697) | 3 credit points – Level P Introduction to Data Science G (11516) | 3 credit points – Level G Exploratory Data Analysis and Visualisation G (11517) | 3 credit points – Level G Data Science Technology and Systems PG (11523) | 3 credit points – Level P AR/VR for Data Analysis and Communication PG (11524) | 3 credit points – Level P

#### IoT & Robotics specialisation - 18 credit points as follows

Computer Vision and Image Analysis PG (8890) | 3 credit points – Level P Engineering Mathematics G (10090) | 3 credit points – Level G Introduction to Computer Engineering G (10096) | 3 credit points – Level G Internet of Things PG (11513) | 3 credit points – Level P Advanced Robotics PG (11525) | 3 credit points – Level P Foundations of Robotics G (11528) | 3 credit points – Level G

#### Project Management specialisation - 18 credit points as follows

Systems Project and Quality Management G (6678) | 3 credit points – Level G IT and Business Alignment PG (6683) | 3 credit points – Level P Information Systems Management PG (7109) | 3 credit points – Level P Project Management PG (8427) | 3 credit points – Level P Enterprise Systems G (11518) | 3 credit points – Level G Workflow and Process Management G (11529) | 3 credit points – Level G

In addition to course requirements, in order to successfully complete your course you must meet the inherent requirements. Please refer to the inherent requirements statement applicable to your course

# Typical study pattern

## UC - Canberra, Bruce

Standard Full Time, Semester 1 Commencing

Year 1

#### Semester 1

Inf. Sc. Research Methodology PG (6797)

Technology and Engineering Management PG (9784)

Two Restricted Choice Units (Level G or PG)

Semester 2

Contemporary IT & E Issues PG (9787)

Two Restricted Choice Units (Level PG)

One Restricted Choice Unit (Level G or PG)

Year 2

#### Semester 1

Technological Innovation and Entrepreneurship G (11530)

Technology Capstone Research Project PG (11522)

One Restricted Choice Unit (Level PG)

#### Standard Full Time, Semester 2 Commencing

Year 1

Semester 2

Inf. Sc. Research Methodology PG (6797)

Technological Innovation and Entrepreneurship G (11530) Two Specialisation Units Year 2 Semester 1 Technology and Engineering Management PG (9784) Three Specialisation Units Semester 2 Contemporary IT & E Issues PG (9787) Technology Capstone Research Project PG (11522) Specialisation Unit

#### Standard Part Time, Semester 1 Commencing

Year 1

Semester 1 Technological Innovation and Entrepreneurship G (11530) Specialisation Unit Semester 2 Contemporary IT & E Issues PG (9787) Specialisation Unit Year 2 Semester 1 Technology and Engineering Management PG (9784) Specialisation Unit Semester 2 Inf. Sc. Research Methodology PG (6797) Specialisation Unit Year 3 Semester 1

Technology Capstone Research Project PG (11522)

#### Semester 2

Two Specialisation Units

#### Standard Part Time, Semester 2 Commencing

Year 1 Semester 2 Technological Innovation and Entrepreneurship G (11530) Specialisation Unit Year 2 Semester 1 Technology and Engineering Management PG (9784) **Specialisation Unit** Semester 2 Contemporary IT & E Issues PG (9787) **Specialisation Unit** Year 3 Semester 1 Inf. Sc. Research Methodology PG (6797) Specialisation Unit Semester 2 Technology Capstone Research Project PG (11522) Year 4 Semester 1 Two Specialisation Units

# **Course information**

## **Course duration**

Standard 1.5 years full time or part-time equivalent. Maximum 5 years from date of enrolment to date of course completion.

### Learning outcomes

#### Learning outcomes

Develop an advanced and integrated understanding and innovation mindset, to identify and analyse complex problems within information technology and systems discipline, and design sustainable novel technology solutions to these problems at a highly skilled level.

#### Related graduate attributes

UC graduates are professional: Communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict.

UC graduates are global citizens: Think globally about issues in their profession; make creative use of technology in their learning and professional lives; behave ethically and sustainably in their professional and personal lives.

UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development.

Navigate in an increasingly complex global technological innovation environment, with legal, ethical, economic and business-related challenges, in a fast-changing field. UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; take pride in their professional and personal integrity.

UC graduates are global citizens: Think globally about issues in their profession; adopt an informed and balanced approach across professional and international boundaries; understand issues in their profession from the perspective of other cultures; make creative use of technology in their learning and professional lives; behave ethically and sustainably in their professional and personal lives.

UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas. Competently use professional skills and knowledge in the systematic development of complex information technologies and system and apply their skills and knowledge in a professionally responsible manner. UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; take pride in their professional and personal integrity.

UC graduates are global citizens: Think globally about issues in their profession; adopt an informed and balanced approach across professional and international boundaries; understand issues in their profession from the perspective of other cultures; make creative use of technology in their learning and professional lives; behave ethically and sustainably in their professional and personal lives.

UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas.

Critically analyse, interpret and synthesise complex problems,<br/>solutions, concepts or theories in information technology and<br/>systems area, to address the needs of a broad range of<br/>stakeholders, including technology specialists, managers,<br/>clients, regulators, etc.UC graduates are problems,<br/>knowledge and sk<br/>critical thinking, an<br/>and real-world problems,<br/>negotiate, and reso

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UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware. Communicate effectively with other computer scientists, information technology and systems specialists, and the wider global community using a wide range of communication technologies, undertake research in information technology and systems, and work professionally as an individual and in a team. UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; take pride in their professional and personal integrity.

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UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas.

Design and develop innovative information technology-based solutions appropriate to the social, political, international, economic and environmental contexts in which they are applied, and engage in the process of research and the continuing learning needed to retain the necessary level of professional skills and knowledge in information technology and systems. UC graduates are professional: Employ up-to-date and relevant knowledge and skills; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems.

UC graduates are global citizens: Think globally about issues in their profession; behave ethically and sustainably in their professional and personal lives.

UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas.

### Awards

#### Award

Master of Information Technology	MIT
Master of Information Technology in Cybersecurity	MIT Cybersecurity
Master of Information Technology in Data Science	MIT DataSc
Master of Information Technology in Cloud Computing	MIT CloudComp
Master of Information Technology in IoT and Robotics	MIT IoT&Robotics
Master of Information Technology in AI and Machine Learning	MIT AI&MachineLrng
Master of Information Technology in Network Technologies	MIT NetworkTech
Master of Information Technology in Project Management	MIT ProjectMgt

## Enquiries

Student category	Contact details
Prospective Domestic Students	Email study@canberra.edu.au or Phone 1800 UNI CAN (1800 864 226)
Current and Commencing Students	In person, Student Centre Building 1 or Email Student.Centre@canberra.edu.au
Prospective International Students	Email international@canberra.edu.au or Phone +61 2 6201 5342

## Download your course guide



# **Scholarships**

Find the scholarship that's the right fit for you

## Explore Scholarships

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ABN 81 633 873 422

CRICOS 00212K

TEQSA Provider ID: PRV12003 (Australian University)

UC acknowledges the Ngunnawal people, traditional custodians of the lands where Bruce campus is situated. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of Canberra and the region. We also acknowledge all other First Nations Peoples on whose lands we gather.